

ABSTRACT**DETERMINING CONNECTIVITY IN COMMUNICATION NETWORKS**

- 5 The connectivity of the nodes in a communication network operated by a network manager is determined by transmitting unique signatures from the nodes and detecting them at other nodes. The network manager correlates the detected signatures and thereby derives the connectivity. One-way trails are established by the detection at one node of a signature sent by another node. When one-way trails are established between the same two nodes, a
- 10 bidirectional trail is established. This enables connectivity in other layers of the network protocol to be determined.

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